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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,077

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Shigeo Ii

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06/13/2008

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EXAMINER

LEA, CHRISTOPHER RAYMOND

ART UNIT

PAPER NUMBER

4161

MAIL DATE

DELIVERY MODE

06/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,077	Applicant(s) II ET AL.	
	Examiner Christopher R. Lea	Art Unit 4161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 & 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/21/05, 07/05/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application is a 371 (national stage application) of PCT/JP03/13469, which claims priority to JP 2002-311677.

Claims 1-8 are pending.

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on May, 9, 2008 is acknowledged. The traversal is on the ground(s) that claim 7 should be a part of Group I. Examiner concurs with applicant that claim 7 should be included in Group I, and examiner had intended to place claim 7 there. This was an oversight on Examiner's part, and it will be rectified. Claims 1-5 & 7 are to be examined, and claims 6 & 8 are withdrawn as belonging to a non-elected invention. Since applicant has not argued the merits of the restriction requirement, the requirement is still deemed proper and is therefore made FINAL.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 04/21/05 and 07/05/05 were filed before the preparation of an action on the merits. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Specification

4. The abstract of the disclosure is objected to because it does not meet the proper language requirements. Applicant is reminded of the proper language and format for an abstract of the disclosure:

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of **50 to 150 words**. The abstract should not exceed **15 lines of text**. The form and legal **phraseology often used in patent claims**, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada *et al.* (US Patent number 5,985,303).

Claims 1 and 5: Okada *et al.* teach a shelf-life extender comprising an isothiocyanate active ingredient (a volatile oily antibacterial substance) supported on a polysaccharide matrix (a water-soluble film forming agent, Abstract and claim 1). Okada *et al.* further teach that the composition may be in a powdery form (column 3 lines 9-12). Further Okada *et al.* teach the humidity dependent behavior of the isothiocyanate composition (column 3 line 22- column 4 line 34). As to the limitations of claim 5, when the prior art invention and the instant invention are the same, they inherently have the same properties.

Claim 2: Okada *et al.* teach that allyl isothiocyanate is the preferred active ingredient (column 2 lines 45-53 and claim 4).

Claim 3: Okada *et al.* teach that gum arabic is among possible polysaccharides for use in the matrix (column 2 line 64 through column 3 line 3 and claim 3).

Claim 4: Okada *et al.* teach that starch is among the possible polysaccharides for use in the matrix, and that multiple matrix substances are possible in the composition (column 2 line 64 through column 3 line 12). A combination of starch and another polysaccharide allows the starch to act as a powder vehicle, thereby anticipating the limitations of claim 4.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada *et al.* (US Patent number 5,985,303) in view of Hiramatsu *et al.* (JP 07-046973, as evidenced by the machine translation attached).

Okada *et al.* teaches, as a whole, a shelf-life extender for food use. Specifically, Okada *et al.* teaches a humidity-dependent powdery composition containing allyl isothiocyanate (abstract, column 3 lines 9-12, also see 102 analysis of claim 1 *supra*).

Okada *et al.* does not teach using this powdery composition is a food storing article.

The deficiency in Okada *et al.* is cured by Hiramatsu *et al.* Hiramatsu *et al.* teaches putting a cyclodextrin-based powdery isothiocyanate composition in a food storing article (claim 1).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the claimed invention was made to substitute the powdery composition Okada *et al.* for the cyclodextrin-based composition of Hiramatsu *et al.* and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Okada *et al.* suggests using the isothiocyanate containing-composition in packaging (column 4 line 10-22). Further Okada *et al.* teach that the powdery composition of Okada *et al.* is superior to a cyclodextrin based shelf-life extender containing isothiocyanate (columns 7-10). One of ordinary skill in the art will recognize that it would be obvious to substitute a superior product for an inferior one.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the foregoing discussion, one of ordinary skill in the art would have concluded that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Lea whose telephone number is (571)270-5870. The examiner can normally be reached on Mon-Thu 7:30-5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Nolan can be reached on 571-272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick J. Nolan/ Supervisory Patent Examiner, Art Unit 4161	/C. R. L./ Examiner, Art Unit 4161
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